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| 09/197,441 | 11/23/1998 | MICHAEL BEHAGEN | 1521/1 | 1283 |

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| EXAMINER |
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| SALCE, JASON P |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2611 | |

DATE MAILED: 01/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☐ Responsive to communication(s) filed on _____.

2a)☒ This action is **FINAL.**          2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle,* 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *18-36* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *18-36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All  b)☐ Some * c)☐ None of:

       1.☐ Certified copies of the priority documents have been received.

       2.☐ Certified copies of the priority documents have been received in Application No. _____.

       3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application)
since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.
37 CFR 1.78.

    a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific
reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: .

## DETAILED ACTION

### Response to Arguments

Applicant's arguments filed 9/17/03 have been fully considered but they are not persuasive.

Applicant argues that Van Ryzin does not "*divide a personal computer into two portions which are then separated and which communicate with each other remotely*". This limitation is not part of the claims in the instant application. Even so, Van Ryzin does in fact teach a wireless monitor 10 separated from a wireless keyboard or mouse 8, where both of these devices communication with one another (see Figure 1). Note that a keyboard (or mouse) and a monitor are part of a personal computer.

Applicant also argues that the mouse and keyboard include a CPU and refers to Figures 7 and 8 for support. Referring to these figures, specifically Figure 8A, a wireless keyboard and mouse device is shown, where the CPU is separate from the actual mouse and keyboard input devices, and is only used to control sending signals to the RF modulator, for transmission to an RF receiver. Therefore, the mouse 8b, keyboard 8a, RF Modulator 8d and antenna 8e can be considered the remote input platform.

Applicant also argues that the keyboard and mouse in Figure 8A include a CPU **(as defined by the applicant)**. The term CPU is defined in Applicant's specification at page 5 (last paragraph) as follows:

"*Hereinafter, the term CPU includes those portions of the computer which control the remainder of the computer, including those peripherals. As defined herein, the CPU includes the control unit and the arithmetic and logic unit (ALU), as well as other components such as memory and temporary buffers, which are*

*required for the operation of the control unit and the ALU. Other types of
microprocessors or data processors are specifically excluded from the term CPU
as herein defined"*.

Van Ryzin discloses that the remote input platform (8) comprises a CPU (8c) in

figure 8. CPU (8c) processes keystrokes by coding them into ASCII for transmission to

the main computer for decoding and/or translation (col. 6, lines 29-36). Van Ryzin's

CPU (8c) **does not** control the remainder of the computer or other peripherals. CPU

(8c) **does not** include a control unit or an ALU, or other components such as a memory

and temporary buffers, which are required for the operation of the control unit and the

ALU. CPU (8c) falls into the category of "other types of microprocessors or data

processors" that are specifically excluded from the term CPU **(as defined by**

**applicant)**.

Applicant continues to insist that the CPU of Van Ryzin is the CPU that the

applicant is lacking in the remote input platform. Again, the examiner notes that the

applicant is separating (in applicant's own specification) a microprocessor or data

processor from an actual CPU (a Pentium 4 for example), which is the central control

unit of a computer, which controls all internal components. The examiner stresses that

even though element 8c in Figure 8A is labeled a "CPU", it is no more than a data

processor used for translating the data into a transmittable format. Furthermore, the

CPU 8c in Figure 8A does not control the remainder of the computer, because in Figure

8A, there is no computer to be controlled, only data from a mouse or keyboard being

translated into data suitable for transmission over a wireless medium (see Column 6,

Lines 28-41 of Van Ryzin).

Applicant also continues to argue that the Examiner still has failed to provide any

evidence that a monitor is not a television set. These arguments are still not

persuasive. Examiner reiterates that elements 2 and 2a in Figure 1 send computer

signals (from a keyboard, mouse, phone, camera, or cable) to a video monitor, therefore

since computer signals are received (not just video signals), the wireless video monitor

(element 10 in Figure 1) is a computer monitor.

Applicant also argues that neither Phan nor Van Ryzin teach that a computer

monitor should be separate from the main part of the computer. Both references teach

that the monitor is separate from the computer (see element 10 and 16 being separate

in Figure 1 of Phan and previous arguments regarding Van Ryzin). Applicant continues

to argue that because of the combination of Phan and Van Ryzin, that the computer

monitor is simply a television. See arguments above regarding Van Ryzin's wireless

monitor (10) in Figure 1.

Applicant also notes that new claim 36 now recites a detachable display device

for supporting local and remote interaction by a user with a main computer. The

examiner notes that according to the claim limitations, this display device comprises the

same elements in the previous claims and encompasses element 12 in applicant's

Figure 1 (the Remote Interaction Device 12). The examiner notes that since the

Remote A/V Display Device 18 and Remote Input Platform 32 are wireless, these

components, together, or in combination can be moved anywhere within the proximity of

the transmission limitations of the wireless medium. This includes in separate room,

away from the main computer, or right next to the main computer. Therefore, by simply

stating a detachable display device does not overcome the rejection by Van Ryzin in

view of Phan. Furthermore, a wireless monitor or keyboard in general does not have an

input or output wire, so the examiner does not understand how such a display device is

"detachable".

Applicant also argues that the combination of Van Ryzin, Yen, Phan and Hare

cannot be made because the signals can only be sent to a television. See again, the

arguments made above regarding Van Ryzin's monitor 10 receiving signals from a

computer system 2.

For the reasons stated above, the rejection stands and this Office Action is made

Final.

### Claim Rejections - 35 USC § 103

1.      The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2.      Claims 18-19, 22, 25-27 and 30-36 are rejected under 35 U.S.C. 103(a) as being

unpatentable over by Van Ryzin (6,131,130) and Phan et al. (Phan) (6,064,437) (of

record).

Considering claims 18, 35 and 36, Van Ryzin discloses a remote display device

(10,8; figure

2) for remote interaction by a user with a main computer (2,14) being in communication

with a main transmitter (20, 20a; figure 3) and a main receiver (28,28a), the main

computer featuring a local video card (22) and the main computer featuring a local input

port for receiving input instructions, the device comprising:

a) a computer monitor (10) for receiving display signals directly from the local video card

(22) through the main transmitter (20, 20a), the computer monitor inherently having a

remote receiver (connected to the antenna) for receiving the display signals wirelessly;

and

b) a remote input platform (8) for receiving input data from the user and for transmitting

the input data to the main computer (10) through the main receiver (28,28a), the remote

input platform featuring a remote transmitter for transmitting the input data to the main

receiver;

such that the device (8,10) lacks a **CPU\* (as defined by Applicant)** and such

that only the main computer has a CPU and wherein the main computer, the computer

monitor and the remote input platform in combination form a computer and wherein the

computer monitor (10) and the remote input platform (8) are physically separable from

the main computer.


\*The term CPU is defined in Applicant's specification at page 5 (last paragraph)

as follows:

"*Hereinafter, the term CPU includes those portions of the computer which control the remainder of the computer, including those peripherals. As defined herein, the CPU includes the control unit and the arithmetic and logic unit (ALU), as well as other components such as memory and temporary buffers which are required for the operation of the control unit and the ALU. Other types of microprocessors or data processors are specifically excluded from the term CPU as herein defined*".

Van Ryzin discloses that the remote input platform (8) comprises a CPU (8c) in figure 8.

CPU (8c) processes keystrokes by coding them into ASCII for transmission to the main

computer for decoding and/or translation (col. 6, lines 29-36).  Van Ryzin's CPU (8c)

**does not** control the **remainder of the computer** or other peripherals.  CPU (8c) **does**

**not** include a control unit or an ALU, or other components such as a memory and

temporary buffers, which are required for the operation of the control unit and the ALU.

CPU (8c) falls into the category of "other types of microprocessors or data processors"

that are specifically excluded from the term CPU (as defined by applicant).

However, Van Ryzin fails to specifically disclose that the main computer features

a local video card for compressing a display signal, wherein the display signal

comprising at least video data and a monitor for receiving a compressed display signal

and decompressing the compressed display signal for displaying video data after

decompression as recited in the claim.

Phan discloses a main computer (14) comprising a video card (22) (figure 2A) for

compressing a display signal, the display signal comprising at least video data and a

wireless remote display device (16,18) for receiving a compressed display signal and

decompressing (28, video expander) (figure 2B) the compressed display signal for

displaying video data after decompression for the advantage of easing bandwidth

requirements on the wireless communication link.  See col. 3, lines 54-57 and column 4,

line 17- col. 5, line 22.

It would have been obvious to one of ordinary skill in the art to modify van

Ryzin's system to include the main computer featuring a local video card for

compressing a display signal, the display signal comprising at least video data and a

display device such as a monitor for receiving a compressed display signal and

decompressing the compressed display signal for displaying video data after

decompression, as taught by Phan, for the advantage of easing bandwidth

requirements on the wireless communication link.

Referring to claim 36, also note the additional limitation of "A detachable display

device". See arguments presented above for why this limitation is still rejected under

Van Ryzin in view of Phan.


Claims 19 and 22 are met by the combined systems of Van Ryzin and Phan,

wherein Van Ryzin discloses RF transmission between the device (8,10) (comprising

remote receiver) and the computer (2,14) (comprising main receiver) in col. 4, lines 8-

54.


Claim 25 is met by the combined systems of Van Ryzin and Phan, wherein Phan

discloses a video expander (28) (figure 2B) for receiving the display signals from the

remote receiver and for expanding the display signals to produce expanded signals.


Considering claim 26, Van Ryzin and Phan fail to specifically disclose an audio

amplifier or amplifying audio signals from the remote receiver as recited in the claim.

The Examiner takes Official Notice that it is notoriously well known in the art to

have an

audio amplifier and speaker associated with a computer monitor system for the advantage of providing audio output from audio-video or multimedia programs.

It would have been obvious to one of ordinary skill in the art to modify the combined

systems of Van Ryzin and Phan (if necessary) to include an audio amplifier and a speaker for the typical advantage of providing audio output from audio-video or multimedia programs.

Claim 27 is met by the combined systems of Van Ryzin and Phan, wherein Van Ryzin discloses remote input platform (8) that comprises a keyboard and touch pad.

Claim 30 is met by the combined systems of Van Ryzin and Phan, wherein Van Ryzin discloses port (26) and/or bus (16) that receive data transmitted directly to the main computer.

Considering claim 31, Van Ryzin discloses a system for remote interaction with a user

comprising:

a) a main computer (2,14) the main computer featuring a CPU, the main computer comprising

(i) a main transmitter (20,20a) for transmitting radio waves (col. 4, lines 8-54);

(ii) a plurality of video cards (VGA card 22, TV tuner card (24), DVD card, CD

card, additional tuner card etc. all connected to switch (18b) described at columns 4-5

and throughout the entire reference);

(iii) an operating system (col. 4, lines 1-7, col. 5, lines 54-67);

b) a computer monitor (10) for display signals from video card (22) through the main

transmitter (20,20a) and featuring a remote radio wave receiver (connected to the

antenna of 10), the computer monitor (10) lacking a CPU; and

c) a remote input platform (8) for receiving input data from the user and for transmitting

the input data to the main computer (10) through the main receiver (28,28a), the remote

input platform featuring a remote radio wave transmitter for transmitting the input data to

the main receiver, the remote input platform lacking a **CPU\* (as defined by Applicant).**


\*The term CPU is defined in Applicant's specification at page 5 (last paragraph)

as follows:

> "*Hereinafter, the term CPU includes those portions of the computer which
> control the remainder of the computer, including those peripherals. As defined
> herein, the CPU includes the control unit and the arithmetic and logic unit (ALU),
> as well as other components such as memory and temporary buffers which are
> required for the operation of the control unit and the ALU. Other types of
> microprocessors or data processors are specifically excluded from the term CPU
> as herein defined*".


Van Ryzin discloses that the remote input platform (8) comprises a CPU (8c) in figure 8.

CPU (8c) processes keystrokes by coding them into ASCII for transmission to the main

computer for decoding and/or translation (col. 6, lines 29-36). Van Ryzin's CPU (8c)

**does not** control the remainder of the computer or other peripherals. CPU (8c) **does**

**not** include a control unit or an ALU, or other components such as a memory and

temporary buffers which are required for the operation of the control unit and the ALU.

CPU (8c) falls into the category of "other types of microprocessors or data processors"

that are specifically excluded from the term CPU (as defined by applicant).


However, Van Ryzin fails to specifically disclose that the main computer includes

at least a second video card for compressing a display signal and a monitor for

receiving a compressed display signal and decompressing the compressed display

signal for displaying video data obtained after decompression as recited in the claim.

Phan discloses a main computer (14) comprising plural video cards including a

video card (22) (figure 2A) for compressing a display signal, the display signal

comprising at least video data and a wireless remote display device (16,18) for

receiving a compressed display signal and decompressing (28) (figure 2B) the

compressed display signal for displaying video data after decompression for the

advantage of easing bandwidth requirements on the wireless communication link.  See

col. 3, lines 54-57 and column 4, line 17- col. 5, line 22.

It would have been obvious to one of ordinary skill in the art to modify van

Ryzin's system to include the main computer to comprise at least a second video card

for compressing a display signal and display device such as a monitor for receiving a

compressed display signal and decompressing the compressed display signal for

displaying video data obtained after decompression, as taught by Phan, for the

advantage of easing bandwidth requirements on the wireless communication link.

Claim 32 is met by the combined systems of Van Ryzin and Phan, wherein Van Ryzin discloses local input device (4) having an input device port on PC board (14) and switch (see the entire reference including but not limited to col. 3, line 3, line 63 – col. 4, line 7 and col. 4, line 30- col. 5, line 28).

Claim 33 is met by the combined systems of Van Ryzin and Phan, wherein Van Ryzin discloses main radio wave receiver (28, 28a) (figure 3).

Claim 34 is met by the combined systems of Van Ryzin and Phan, wherein Van Ryzin discloses the switching between the local input and remote input throughout the entire reference including but not limited to col. 3, line 3, line 63 – col. 4, line 7 and col. 4, line 30- col. 5, line 28.

3.      Claims 20-21 and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Ryzin and Phan as applied to claim 18 above, and further in view of Yen (of record).

Considering claims 20 and 23, Van Ryzin and Phan fail to specifically disclose radio waves in a range of from about 2.4 GHz to about 5.8 GHz as recited in the claims.

In a strikingly similar system Yen teaches that remote computer displays should use a band around 2.4 GHz. In addition this band is considered to be and ISM band SP².

It would have been obvious to modify the combined systems of Van Ryzin and Phan, to include the frequency band of 2.4GHz to about 5.8 GHz, as taught by Yen, for the typical advantage of conforming to known practices and FCC regulations.

Claims 21 and 24 are met by the combined systems of Van Ryzin, Phan and Yen, wherein the 2.4GHz band (taught by Yen) is considered to be an ISM band SP[2].

4.      Claims 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Ryzin and Phan as applied to claim 18 above, and further in view of Hare et al. (Hare) (6,084,638) (of record).

Considering claims 28 and 29, Van Ryzin and Phan fail to specifically disclose the remote input platform comprises a microphone and joystick port as recited in the claims.

In a strikingly similar system, Hare teaches the use of plural input devices (27a-d) and ports including a microphone, joystick and joystick port for the advantage of facilitating the user with various input devices to make selections (including voice commands). See the entire reference including but not limited to col. 6, line 64 - col. 7, line 20.

It would have been obvious to one of ordinary skill in the art to modify the combined systems of Van Ryzin and Phan to include microphone and joystick port, as taught by Hare for the advantage of facilitating the user with a system that is responsive to voice and/or joystick commands.

*Conclusion*

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason P Salce whose telephone number is (703) 305-1824. The examiner can normally be reached on M-Th 8am-6pm (every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on (703) 305-4380. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-5359.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

December 22, 2003

ANDREW FAILE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600